

In the Claims

Please amend the claims, without prejudice to filing future continuing applications, to read as follows:

1. (AMENDED) An isolated protein or a salt thereof which has an amino acid identical to or substantially identical to an amino acid sequence represented by SEQ ID No: ~~2~~ 15.
2. (Cancelled)
3. (ORIGINAL) The protein or a salt thereof according to claim 1, which belongs to an ADAM family.
4. (Cancelled)
5. (ORIGINAL) The protein or a salt thereof according to claim 1, which has a protease activity.
6. (Cancelled)
7. (AMENDED) A DNA ~~which has a DNA~~ having a base sequence encoding for a protein ~~having an amino acid sequence identical or substantially identical to an amino acid sequence represented by SEQ ID No: 2~~ according to claim 1.
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (AMENDED) A recombinant vector which has the DNA encoding for a protein according to claim ~~7~~ 1.
12. (AMENDED) A transformant host cell transformed with the recombinant vector according to claim 11.
13. (AMENDED) A method for producing the protein or a salt according to claim 1, which comprises culturing ~~the a~~ transformant host cell ~~according to claim 12 to produce the protein according to claim 1~~ transformed with a recombinant vector comprising an expressible DNA encoding for said protein, and culturing said host cell under suitable conditions for sufficient time to produce said protein.

14. (AMENDED) An antibody against the protein or a salt thereof according to claim 1 or the partial peptide or a salt thereof ~~according to claim 6.~~

15. (AMENDED) A diagnostic agent which comprises ~~the~~ a DNA encoding for the protein according to claim 1 ~~7~~ or ~~the~~ an antibody ~~according to claim 14~~ which binds to said protein.

16. (AMENDED) An agent which comprises the protein or a salt thereof according to claim 1 or the partial peptide or a salt thereof ~~according to claim 6.~~

17. (AMENDED) A medicine which comprises the protein or a salt thereof according to claim 1 or the partial peptide or a salt thereof ~~according to claim 6~~ and a pharmaceutically acceptable carrier, excipient or diluent.

18. (AMENDED) A method ~~The medicine according to claim 17, which is an agent for preventing or treating disc herniation, ischialgia, glomerular nephritis, diabetic nephropathy, hepatic fibrosis, pulmonary fibrosis or osteopetrosis,~~ said method comprising administering a medicine according to claim 17 to a patient in need thereof.

19. (ORIGINAL) A method for screening for a compound or a salt thereof which promotes or inhibits the protease activity, which comprises using the protein according to claim 1 or a salt thereof.

20. (ORIGINAL) A kit for screening for a compound or a salt thereof which promotes or inhibits the protease activity, which comprises the protein according to claim 1 or a salt thereof.

21. (AMENDED) A compound or a salt thereof which promotes or inhibits the protease activity and is obtainable by using the method for screening according to claim 19 ~~or the kit for screening according to claim 20.~~

22. (AMENDED) A medicine which comprises a compound or a salt thereof which promotes or inhibits the protease activity and is obtainable by the screening method according to claim 19 ~~or the kit for screening according to claim 20.~~

23. (CANCELED)

24. (CANCELED)

25. (CANCELED)

26. (CANCELED)

27. (CANCELED)

28. (CANCELED)

29. (CANCELED)

30. (CANCELED)

31. (CANCELED)

32. (ORIGINAL) A method for detecting a proteoglycan degrading enzyme gene, which comprises mixing and culturing a transformant in which a test gene is introduced and an animal-derived cell producing cartilage or cartilage matrix, and measuring glycosaminoglycan sulfate in the culture supernatant.

33. (ORIGINAL) A method for screening an agent for inhibiting or promoting the proteoglycan degrading enzyme activity, which comprises mixing and culturing (i) a recombinant in which a gene encoding a protein having the proteoglycan degrading enzyme activity is introduced, (ii) an animal-derived cell producing cartilage or cartilage matrix, and (iii) a test compound, and measuring glycosaminoglycan sulfate in the culture supernatant.

34. (AMENDED) A method for screening an agent for inhibiting or promoting the activity of proteoglycan degrading enzyme, which comprises mixing and culturing (i) an animal cell comprising (a) the DNA according to claim 7, or (b) a DNA comprising a DNA having a base sequence encoding a protein having an amino acid sequence identical or substantially identical to an amino acid sequence represented by SEQ ID No: 5, (ii) an animal-derived cell producing cartilage or cartilage matrix, and (iii) a test compound, and measuring an amount of glycosaminoglycon sulfate in the supernatant.

35. (AMENDED) A non-human mammal which has a DNA having a DNA having a base sequence encoding an protein having an amino acid sequence identical or substantially identical to an amino acid sequence represented by SEQ ID No: 15 ~~2~~, or a its mutated DNA.

36. (AMENDED) The animal according to claim 35, which may express a protein having an amino acid sequence identical or substantially identical to an amino acid sequence represented by SEQ ID No: 15 ~~2~~.